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10/516,548	12/02/2004	Leonardus Joseph Michael Ruitenburg	NL 020540	5731

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EXAMINER	
HU, RUI MENG	

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/516,548
Filing Date: December 02, 2004
Appellant(s): RUITENBURG ET AL.

Mark A. Wilson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed on 08/18/2009 appealing from the Office action mailed on 05/13/2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,683,925	Katsura et al.	01-2004
2002/0048267	Jacques et al.	04-2002
5,852,772	Lampe et al.	12-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. **Claims 1 and 4** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Katsura et al. (US Patent 6683925)** in view of **Jacques et al. (US Pub 2002/0048267).**

Consider **claim 1**, Katsura et al. disclose (figure 11) a receiver signal strength indication circuit receiving a discretely controlled amplified signal from an amplifying means 15, the circuit comprising: narrow filter means 7 coupled to an output of the discretely controlled amplifying means 15, said narrow filter means 7 providing a limited spectrum of the input signal; logarithmic detector means 11 for receiving and logarithmically amplifying an output of the narrow filter 7; analog-to-digital (ADC) means 12 for converting the output of the logarithmic detector to a digital receiver signal strength indication. In a second embodiment, Katsura et al. disclose (column 9 line 55-column 10 line 13, figure 16) memory means 35 to store an amplification setting of the discretely controlled amplifying means relative to a first radio-frequency (RF) input level and the digital receiver signal strength indication.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Katsura et al. (figure 16, table 35) into the art of Katsura et al. (figure 11) as to include table 35 for a fast control.

Katsura et al. disclose a level of a received signal supplied to a variable gain circuit is detected at a start of an operation by a level detection circuit having a wide input voltage range and a gain of the variable gain circuit is coarsely feedback controlled. However Katsura et al. fail to disclose wherein the stored amplification

setting is configured to serve as a reference to tune the circuit for a subsequent RF input level.

In the same field of endeavor, Jacques et al. disclose (Abstract) successive received signal strengths are measured and gain levels are stored as estimates for an initial gain level in future time slots of the TDD signal.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Jacques et al. into the art of Katsura et al. as to use a stored gain setting associated with a gain level for setting an initial gain level in future.

Consider **claim 4 as applied to claim 1**, Katsura et al. as modified by Jacques et al. disclose wherein the amplifying means include a mixer (figure 11, mixer 5).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Katsura et al. (US Patent 6683925)** as modified by **Jacques et al. (US Pub 2002/0048267)** in view of **Lampe et al. (US Patent 5852772).**

Consider **claim 3 as applied to claim 1,** Katsura et al. as modified by Jacques et al. fail to disclose wherein the amplifying means include selectivity filtering means connected between the discretely controlled amplifying means and the logarithmic detector means. This teaching is taught by Lampe et al. in figure 8, first filter 72 or second filter 84 connected between the amplifying means 64 and the log detector 76.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection techniques taught by Lampe et

al. into the art of Katsura et al. as modified as to include the filtering means to adaptively remove interferences.

(10) Response to Argument

Regarding **claim 1**, Appellant argues that the applied references Katsura et al. and Jacques et al. fail to disclose the claimed limitations "narrow filter means coupled to an output of the discretely controlled amplifying means (A1-A4), said narrow filter means providing a limited spectrum of the input signal; logarithmic detector means for receiving and logarithmically amplifying an output of the narrow filter". Particularly, Appellant argues that the claimed narrow filter is a band-pass filter including two cutoff frequencies where the frequency signals above and below the cutoff frequencies are attenuated, but the low-pass filter 7 in figure 11 of Katsura et al. is not a band-pass filter; Appellant further argues Katsura et al. fails to teach a narrow bandwidth. Although the Examiner refers in the Advisory Action to passing baseband signals, the mere reference to baseband signals does not indicate that the baseband bandwidth is small, or narrow. In fact, the baseband bandwidth of the low-pass filter of Katsura potentially could be very large, or wide. The Examiner does not provide any evidence of a small, or narrow, bandwidth of the low-pass filter of Katsura. Therefore, the Examiner's articulated reasoning based on the purportedly "narrow" bandwidth of the low-pass filter of Katsura nevertheless fails to establish a prima facie case of obviousness at least because the Examiner's reasoning is not supported by a rational underpinning to show how the baseband bandwidth of the low-pass filter might be small, or narrow.

The Examiner respectfully submits that claim 1 recites "narrow filter", but the claim fails to clearly mention the narrow filter is a narrow band-pass filter having two cutoff frequencies where the frequency signals above and below the cutoff frequencies are attenuated; further claim 1 fails to specify the term "narrow", such term "narrow" is a relative term, e.g., a filter for passing 2 channels is considered a narrow filter in comparison to a filter for passing 5 channels, regardless the bandwidth of the channel; a filter having 1MHz bandwidth is considered a narrow filter in comparison to a filter having 5MHz bandwidth, or a filter having 5MHz bandwidth is considered a narrow filter in comparison to a filter having 10MHz bandwidth. Therefore the claimed "narrow filter" is vague, which can reasonably read on filters having a finite/limited bandwidth, e.g., a one-channel band-pass filter, a 10-channel band-pass filter, a low-pass filter, or a notch filter, but except high-pass filters.

Katsura et al. disclose in column 1 lines 55-59, column 5 lines 13-17, and figure 11, the base band signal obtained through conversion is amplified by a low-noise amplifier and the resulting signal is supplied to a low-pass filter (LPF) 7 where an interference wave such as an adjacent channel component is removed from the base band signal. Therefore, the LPF 7 passes only the desired channel signal, and reasonably reads on "narrow filter".

Therefore, Katsura et al. disclose in figure 11, the claimed limitations in argument, narrow filter means (low-pass filter 7 for passing only the desired baseband signal) coupled to an output of the discretely controlled amplifying means 15, said narrow filter means 7 providing a limited spectrum of the input signal (the resulting

signal of amplifying means 15 is supplied to low-pass filter 7 where an interference wave such as an adjacent channel component is removed from the base band signal); logarithmic detector means 11 (column 5 lines 26-31) for receiving and logarithmically amplifying an output of the narrow filter 7 (figure 11).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/RuiMeng Hu/

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to RuiMeng Hu whose telephone number is 571-270-1105.

The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/RuiMeng Hu/
R.H./rh
November 9, 2009

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